

Claims

1. A digital camera having a CMOS image sensor (2) with a plurality of pixels each storing within an exposure time (B) a brightness-dependent charge which is outputted as a pixel signal under the control of a control device (8), and a correction device (6, 10) which, after a pixel RESET of the image sensor, forms the difference from first and second sampled values detected toward the onset and end of the exposure time for the pixel, and outputs the second sampled value reduced by the first sampled value as the wanted signal, characterized in that the control device (8) delays the sampling for the first sampled value by a predetermined delay time (D) after RESET.

2. A digital camera according to claim 1, characterized in that the delay time (D) corresponds to about 1 percent to 20 percent, preferably 2 percent to 10 percent, of the exposure time (B).

3. A digital camera according to either of claims 1 and 2, characterized in that the first sampled value for the particular pixels is stored digitally in an image memory (10), and the stored, digital sampled value is subtracted digitally from the second, digital sampled value.

4. A digital camera according to any of claims 1 to 3, characterized in that a comparator device compares the second sampled value or the first sampled value with a threshold value (Th), and if the threshold value is exceeded the first sampled value, preferably multiplied by a scaling factor, is outputted as the wanted signal.

5. A digital camera according to claim 4, characterized in that the following is outputted as the wanted signal in accordance with the brightness derived from the first and/or second sampled value:

- a) in a low brightness range: the difference of the sampled values;
- b) in a high brightness range: the value derived solely from the first sampled value; and
- c) in a medium brightness range: a weighted mixed value obtained from the values according to a) and b).

6. A digital camera according to any of claims 3 to 5, characterized in that a dark value offset memory (11) is provided, and an offset value belonging to a particular pixel and prestored in the dark value offset memory (11) is subtracted from the first sampled value of said pixel.

7. A method for controlling a CMOS image sensor (2) by the so-called CDS method wherein pixels of the image sensor sampled toward the onset and end of an exposure time (B) and a wanted signal is formed by subtracting the first sampled value from the second sampled value, characterized in that the first sampled value is obtained with usable image information after a predetermined delay time after RESET.

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